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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,646	03/29/2004	Masaaki Hiroki	0756-7284	9582
31780	7590	10/12/2005	EXAMINER	
ERIC ROBINSON PMB 955 21010 SOUTHBANK ST. POTOMAC FALLS, VA 20165			NGUYEN, VINH P	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/810,646

Applicant(s)

HIROKI, MASA AKI

Examiner

VINH P. NGUYEN

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-13 and 16-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 and 10-13 is/are allowed.
- 6) ☒ Claim(s) 16, 17, 19, 23, 24 and 26 is/are rejected.
- 7) ☒ Claim(s) 18, 20-22, 25 and 27-29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. Claims 16- 29 are objected to because of the following informalities:

In claims 16 and 23, it is unclear how a current control TFT (113,706) is interconnected with the opposing detector for inspecting the element substrate. It appears that this current control TFT is located on the element substrate to be inspected and it is not a part of a test device, its limitation is not given any patentable weight.

The dependent claims not specifically address share the same indefiniteness as they depend from objected base claims.

Appropriate correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 16,19,23,26 are rejected under 35 U.S.C. 102(b) as being anticipated by Millard et al. (Pat # 5,179,279).

As to claims 16 and 23, Millard et al disclose an apparatus for non contact testing of a device under test as shown in figure 1 having an element substrate (40) to be inspected, a source of electromagnetic waves (11,12) and a plasma forming member (18). It is noted that the plasma forming member (18) is read as an opposing detector substrate and the plasma is an ionization gas (15) formed between the opposite detector substrate (18) and the inspected substrate (40).

As to claims 19 and 26, Millard et al teach that the plasma forming member (18) is a metal foil and this foil is qualified as an opposing detector electrode.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Millard et al. (Pat # 5,179,279) in view of Ito et al (Pat # 5,680,056).

As to claims 17 and 24, Millard et al disclose an apparatus for non contact testing of a device under test as recited in previous paragraph # 8. Millard et al do not mention about the wavelength for the electromagnetic waves source. Ito et al teach that it would have been well known to have the laser source with a wavelength over one micrometer or below 300 nanometers would require less power to produce plasma (see column 10, lines 1-3). It would have been obvious for one of ordinary skill in the art to provide the laser source of Millard et al with a laser wavelength over one micrometer and below 300 nanometers (in a range of 0.01 to 100 nm) as taught by Ito et al so that less power is required to produce plasma.

6. Claims 18,20-22 and 27-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art does not disclose an ammeter for measuring an electric current between the opposing detector substrate and the element substrate through the ionized gas as recited in claim 18.

The prior art does not disclose the opposing detector electrode is made of a beryllium or aluminum conductor that permits the transmission of electromagnetic wave or x-ray of a wavelength of 0.01 to 100nm as recited in claims 20-21 and 27-28.

The prior art does not disclose an opposing detector substrate has a plural TFTs and plural electrodes connected to the TFTs as recited in claims 22 and 29

7. Claims 1-7,10-13 are allowable. The prior art does not disclose an opposing detector substrate has a /plural TFTs and a/plural electrodes connected to the TFTs as recited in claims 1 and 11. Since claims 2-7,10,12-13 depend from claims 1 and 11, these claims are also allowed accordingly.

8. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

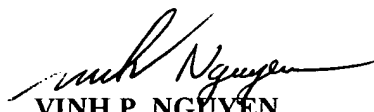
9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (571)-272-1964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
VINH P. NGUYEN  
PRIMARY EXAMINER  
ART UNIT 2829  
10/08/05